

Avery Dennison® T-6500

High Intensity Prismatic Grade Reflective Sheeting
Permanent Traffic Signage
Pressure Sensitive Adhesive for Aluminum

Data Bulletin # T-6500

12/2004

Description:

Avery Dennison® T-6500 High Intensity Prismatic Grade Reflective Sheeting is a high-quality, durable micro-prismatic retroreflective material. Its unique prismatic construction provides an extra high level of reflectivity for demanding traffic control situations. Exceeds applicable requirements for very high intensity grade sheeting applications for Types III and IV retroreflective sheeting as set forth in ASTM D 4956.

Construction:

Face Film:	High gloss
Adhesive	Permanent Pressure Sensitive (Class 1)
Liner:	Film

Photometric Performance:

Exceeds Types III and IV values per ASTM D 4956. Minimum Coefficient of Retroreflection (R_A) ($\text{cd} / \text{lx} / \text{m}^2$)

Observation Angle	Entrance Angle	White	Yellow	Orange	Green	Red	Blue	Brown
0.1°	-4°	500	380	200	70	90	42	25
	30°	240	175	94	32	42	20	12
0.2°	-4°	360	270	145	50	65	30	18
	30°	170	135	68	25	30	14	8.5
0.5°	-4°	150	110	60	21	27	13	7.5
	30	72	55	28	10	13	6	3.5

Note: 0.1° Observation angle is a "Supplemental Requirement" in ASTM D-4956. It represents long highway viewing distances of about 275 Meters (900 ft.) and greater.

Colors & Specification Limits (Daytime)^A:

Color	1		2		3		4		Luminance (Y%)	
	x	Y	x	y	x	y	x	y	Min	Max
White	0.303	0.300	0.368	0.366	0.340	0.393	0.274	0.329	40	--
Yellow	0.498	0.412	0.557	0.442	0.479	0.520	0.438	0.472	24	45
Orange	0.558	0.352	0.636	0.364	0.570	0.429	0.506	0.404	14	30
Blue ^B	0.140	0.035	0.244	0.210	0.190	0.255	0.065	0.216	1.0	10
Green ^B	0.026	0.399	0.166	0.364	0.286	0.446	0.207	0.771	3.0	12
Red	0.648	0.351	0.735	0.265	0.629	0.281	0.565	0.346	3.0	15
Brown	0.430	0.340	0.610	0.390	0.550	0.450	0.430	0.390	4.0	9.0

^AThe four pairs of chromaticity coordinates determine the acceptable color in terms of the CIE 1931 Standard Colorimetric System measured with Standard Illuminant D65. ^BThe saturation limit of green and blue may extend to the border of the CIE chromaticity locus for spectral colors

Avery Dennison® T-6500 continued...

Other Specifications:

Consult your Avery Dennison Representative for information concerning additional world-wide specifications.

Physical Properties:

Outdoor Durability	Avery Dennison T-6500 is warranted for 10 years (3 years for orange) when properly processed and applied..
Minimum Surface & Ambient Air Application Temperature	65°F (18°C) when applied with a squeeze roll applicator.
Application Surface	Flat surfaces only. Not recommended for unpainted stainless steel. Always pretest your specific substrate prior to application. Note: Wet method of application is not recommended for Avery Dennison T-6500 reflective sheeting.
Service Temperature Range	-40°F to 180°F (-40°C to 82°C)
Typical Film Caliper (w/adhesive)	17 to 18 mils
Shelf Life	One year when stored at the following temperature and conditions 68° - 77°F (20° - 25°C) and 50% \pm 5% \pm R.H.
Other Tests:	T-6500 meets all other requirements set forth in ASTM D 4956 including Shrinkage, Flexibility, Liner removal, Adhesion, Impact resistance, Specular gloss and Outdoor weathering (Types III and IV).

Application & Conversion Information:

The following Avery Dennison literature will provide complete information to the user for proper application, storage, and other requirements and is available from your Avery Dennison representative, from the Avery Dennison web-site www.reflectives.averydennison.com, or on request:

Sign Mounting /Orientation:

This prismatic sheeting does not require a special orientation for mounting and thus does not require an orientation arrow datum mark).

Approved screen printing inks:

Ink Supplier	Ink Series	Ink System	Instructional Bulletins
Avery Dennison	4930 Inks	1 Part Solvent	#8.40
Avery Dennison	UVTS™ NazDar	UV Curing	#8.38

Avery Dennison® T-6500 continued...

Instructional Bulletins:	
Storage, Handling & Cleaning	#8.00
Substrate Requirements	#8.01
Contractor's Guide for Storage	#8.04
Application of PS Adhesive	#8.10
Cutting Methods	#8.20
Computer Sign Cutting	#8.25
Screen Preparation	#8.30
Troubleshooting Printing	#8.34
Proper Storage Booklet	#8.50
Ink Recommendation Guide	#8.55

Color Availability:	
T-6500	White
T-6501	Yellow
T-6504	Orange
T-6505	Blue
T-6507	Green
T-6508	Red
T-6509	Brown

Warranty:

WARRANTY: All statements, technical information and recommendations about Avery Dennison products are based upon tests believed to be reliable but do not constitute a guarantee or warranty. All Avery Dennison products are sold with the understanding that Purchaser has independently determined the suitability of such products for its purposes. Avery Dennison products are warranted to be free from defects in material and workmanship for either one year (or the period stated on the specific product information literature in effect at time of delivery, if longer) from date of shipment if said product is properly stored and applied. It is expressly agreed and understood that Avery Dennison's sole obligation and Purchaser's exclusive remedy under this warranty, under any other warranty, express or implied, or otherwise, shall be limited to repair or replacement of defective product without charge at Avery Dennison's plant or at the location of product (at Avery Dennison's election), or in the event replacement or repairs is not commercially practical, to Avery Dennison's issuing Purchaser a credit reasonable in light of the defect in the product.

Avery Dennison's liability for defective products shall not exceed the purchase price paid therefore by Purchaser and in no event shall Avery Dennison be responsible for any incidental or consequential damages whether foreseeable or not, caused by defects in such product, whether such damage occurs or is discovered before or after replacement or credit, and whether or not such damage is caused by Avery Dennison's negligence.

NO EXPRESS WARRANTIES AND NO IMPLIED WARRANTIES, WHETHER OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR USE, OR OTHERWISE (EXCEPT AS TO TITLE), OTHER THAN THOSE EXPRESSLY SET FORTH ABOVE WHICH ARE MADE EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, SHALL APPLY TO PRODUCTS SOLD BY AVERY DENNISON. AVERY DENNISON SPECIFICALLY DISCLAIMS AND EXCLUDES ALL OTHER SUCH WARRANTIES. NO WAIVER, ALTERATION, ADDITION OR MODIFICATION OF THE FOREGOING CONDITIONS SHALL BE VALID UNLESS MADE IN WRITING AND MANUALLY SIGNED BY AN OFFICER OF AVERY DENNISON.

Avery Dennison , 6565 W. Howard, Niles, IL 60714, USA, 1-800-327-5917, www.reflectives.averydennison.com

T-6500 is protected by the following US patents: 4,460,449; 4,633,567; 5,156,863; 4,486,363; 4,601,861; 5,213,872; 5,310,436; 5,930,041